

REMARKS

Claims 1-72 are pending. All are rejected. Of these claims, claim 64 is amended solely to correct punctuation and antecedent basis. No new matter is added by this amendment. Reconsideration and allowance of the application are respectfully requested in view of the foregoing amendments and following remarks.

Claim Rejections – 35 U.S.C. §101

Claims 1-32 and 69-70, of which claims 1, 18, 21, and 69 are independent, stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicant respectfully traverses this rejection.

The test for statutory subject matter is set forth in *In re Bilski*, 2008 WL 4757110 (Fed. Cir. October 30, 2008) as:

A claimed process is surely patent-eligible under §101 if:
(1) it is tied to a particular machine or apparatus, or
(2) it transforms a particular article into a different state or thing.

Additionally, elements (1) and/or (2) should impose meaningful limitations on claim scope and (2) should not be merely insignificant post-solution activity.

In the present case, each of independent claims 1, 18, 21, and 69 satisfy prong (1) and/or (2) of the Bilski test.

For example, claim 1 satisfies prongs (1) and (2) in that it recites, in pertinent part (emphasis added):

receiving at least one digital image data input stream, said digital image data input stream containing digital image information;

creating at least two digital image data streams from said at least one digital data input stream, each of said at least two digital image data streams comprising at least a portion of said digital image information;

merging said at least two digital image data streams into a common digital image data output stream;

converting said common digital image data output stream into an analog image output stream; and

providing said analog output image stream for transmission across said analog interface; ...

Prong (1) is satisfied because claim 1 recites “an analog interface.” Prong (2) is satisfied because claim 1 is directed to transforming (e.g., “merging” and “converting”) digital image data (a particular article) into a different state or thing (e.g., “common digital image data output stream” and “analog image output stream.”).

As another example, claim 18 satisfies prongs (1) and (2) in that it recites, in pertinent part (emphasis added):

receiving at least one digital image data input stream, said digital image data input stream containing digital image information;

creating at least two digital image data streams from said at least one digital data input stream, each of said at least two digital image data streams comprising at least a portion of said digital image information, and wherein a first one of said at least two digital image data streams comprises a first image having a first resolution, and wherein a second one of said at least two digital image data streams comprises a second image having a second resolution;

converting a first one of said at least two digital image data streams into a first analog image output stream, and converting a second one of said at least two digital image data streams into a second analog image output stream;

communicating said first analog output image stream across a first analog interface, and communicating said second analog output image stream across a second analog interface;

receiving said first analog output image stream from across said first analog interface, said first analog output image stream comprising said first image;

receiving said second analog output image stream from across said second analog interface, said second analog output image stream comprising said second image;

displaying said first image of said first analog output image stream on a first analog display device; and

displaying said second image of said second analog output image stream on a second analog display device

wherein said step of creating at least two digital image data streams comprises the following step performed prior to said steps of converting:

extracting at least one portion of an image frame of said at least one digital image data input stream to form a windowed partial image corresponding to one of said at least two digital image data streams, providing multiple possible available frame rates for each of said at least two digital image data streams, and adapting a frame rate of at least one of said at least two digital image data streams to one of said multiple possible available frame rates to match the bandwidth characteristics of said first or second analog interface to allow the transmission of a desired amount of image information within the bandwidth of said first or second analog interface; ...

Prong (1) is satisfied because claim 18 recites “a first analog interface”, “a second analog interface”, a “first analog display device”, and “a second analog display device”. Prong (2) is satisfied because claim 18 is directed to transforming (e.g., “creating” and “converting” and “extracting”) digital image data (a particular article) into a different state or thing (e.g., “first analog data output stream” and “second analog image output stream” and “windowed partial image”).

As another example, claim 21 satisfies prongs (1) and (2) in that it recites, in pertinent part (emphasis added):

providing said digital image data, said digital image data comprising a full image;

processing said digital image data in a first processing operation to create first processed image data comprising a first image;

processing said digital image data in a second processing operation to create second processed image data comprising a second image;

merging said first and second processed image data into a common merged data stream;

converting said merged data stream into a composite analog video stream containing said first and second images; and

providing said composite analog video stream for communication across an analog interface;

wherein at least one of:

said first processed image data has an image resolution that is different from an image resolution of said second processed image data, or

said first processed image data comprises a different portion of said digital image data than said second processed image data or

a combination thereof; and

wherein said steps of processing said digital image data in said first and second processing operations each comprises at least one of the following steps:

segmenting an image frame of said digital image data into multiple segments that each correspond to one of said first or second processed image data, and inserting alignment data into one or more of said multiple segments; or

extracting at least one portion of an image frame of said digital image data to form a windowed partial image corresponding to one of said first or second processed image data, providing multiple possible available frame rates for each of said first and second processed image data, and adapting a frame rate of at least one of said first and second processed image data to one of said multiple possible available frame rates to match the bandwidth characteristics of said analog interface to allow the transmission of a desired amount of image information within the bandwidth of said analog interface...

Prong (1) is satisfied because claim 21 recites “an analog interface”. Prong (2) is satisfied because claim 21 is directed to transforming (e.g., “processing” and “merging” and “converting” and “segmenting” and “inserting” and “extracting”) digital image data (a particular

article) into a different state or thing (e.g., “first processed image data” and “second processed image data” and “common merged data stream” and “windowed partial image”).

As a final example, claim 69 satisfies prongs (1) and (2) in that it recites, in pertinent part (emphasis added):

receiving at least one digital image data input stream, said digital image data input stream containing digital image information;

creating at least two digital image data streams from said at least one digital data input stream, each of said at least two digital image data streams comprising at least a portion of said digital image information;

merging said at least two digital image data streams into a common digital image data output stream;

providing said common digital image data output stream for transmission across said digital interface, or

converting said common digital image data output stream into an analog image output stream and providing said analog output image stream for transmission across an analog interface;

wherein said step of creating at least two digital image data streams comprises at least one of the following steps performed prior to said step of merging said at least two digital image data streams:

segmenting an image frame of said at least one digital image data input stream into multiple segments that each correspond to one of said at least two digital image data streams, and inserting alignment data into one or more of said multiple segments; or

extracting at least one portion of an image frame of said at least one digital image data input stream to form a windowed partial image corresponding to one of said at least two digital image data streams, providing multiple possible available frame rates for each of said at least two digital image data streams, and varying a frame rate of at least one of said at least two digital image data streams relative to the frame rate of another of said at least two digital image data streams;...

Prong (1) is satisfied because claim 69 recites “an analog interface”. Prong (2) is satisfied because claim 21 is directed to transforming (e.g., “creating” and “merging” and “converting” and “segmenting” and “inserting” and “extracting”) digital image data (a particular article) into a different state or thing (e.g., “digital image data streams” and “common digital data output stream” and “windowed partial image”).

In each case, the machine or apparatus limitations are meaningful in that they cannot be deleted and still have the independent claims make sense. Additionally, in each case, the transformation is significant concurrent-solution (not insignificant post-solution) activity, because the transformations are necessary to produce the “different state or thing”.

For at least these reasons, each of independent claims 1, 18, 21, and 69 are directed to patent-eligible subject matter under Section 101, as are the claims that respectively depend therefrom. Applicant therefore respectfully submits that this rejection has been overcome and respectfully requests that the above-identified rejection be withdrawn so claims 1-32 and 69-70 can be passed to allowance and issue.

35 U.S.C. §103 Rejections

Claims 1-72 stand rejected under 35 U.S.C. §103(a) as allegedly being anticipated by USPN 5,963,247 to Bannitt, et al. (“Bannitt”). Applicant respectfully traverses on the grounds that the rejection is improper.

For example, to establish a *prima facie* case of obviousness under MPEP 2114.03, the Office Action must duly consider all of a claim’s limitations and establish a motivation to modify the teachings of the cited reference. Mere conclusory statements do not suffice; instead, a *prima facie* case requires articulated reasoning with rational underpinnings that supports the legal conclusion of obviousness. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007)(quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

In this case, the Office Action states, “Bannitt does not explicitly teach the input of digital video” (p.4) and then improperly offers only the following conclusory statement as proof of obviousness:

However, the system of Bannitt includes but does not limit to photographic film in capturing images and that the system allows for modification keeping in the spirit of the invention. (Id.)

Respectfully, the first half of this statement is not correct, for Figure 9 and columns 16 – 17 of Bannitt show a movie camera (282) coupled with a video recorder (286). Notwithstanding this teaching, however, claims 1-72 are believed to be patentable over Bannitt, as further explained below. The second half of the above statement merely asserts nothing more or less than that Bannitt’s system can be modified. Additionally, the remainder of the Office Action merely integrates seemingly random citations to various parts of Bannitt with cuts, pastes (and/or paraphrases) of selected sections of Applicant’s claims. At no point, does the Office Action provide a detailed, articulated line of reasoning explaining (a) why Bannitt might be analogous or (b) why/how a person of ordinary skill in the art would have (or could have) modified Bannitt to conceive the subject matter presently recited in any of the pending independent claims. In fact, the cited parts of Bannitt either teach away from Applicant’s claimed subject matter or are simply irrelevant.

Bannitt is concerned with “...generating a composite, three-dimensional-like image sequences [sic], by the assembly of two or more separate image sequences...” (Bannitt, Abstract) In contrast, embodiments of Applicant’s claimed invention address at least one different and unrelated problem, which is how to transfer multi-resolution digital image data “...in a manner compatible with reduced frame rate characteristics of existing CCTV video surveillance industry technology....” (Applicant’s Summary, page 6).

As explained in pertinent parts of columns 16 and 17 of Bannitt:

The cameraman utilizes the camera 282 initially to film the primary image sequence which is displayed, during filming, on the monitor 284. At the same time the filmed scene is recorded, typically at a low resolution on video recorder 286. When the cameraman turns to film one of the secondary image sequences With the same camera or a different one, he displays the recorded scene from the video recorder 286 on the monitor 284. Paying attention to the camera motion therein recorded, the cameraman

attempts the [sic] match the camera motion while filming the scenes for the second secondary image sequence....The left and right image sequences are recorded on whatever media that has been decided – film, video or other techniques. Now, for each of the two side, or secondary sequences, rough matching to the center sequence is carried out

Simply put, these teachings of Bannitt are completely opposite the subject matter recited in Applicant's independent claims, of which claims 1, 18, 21, and 69 were quoted in pertinent part above, and there is no reason, except hindsight, why a person of ordinary skill in the art would have been motivated to look to Bannitt while conceiving Applicant's claimed invention. Moreover, even if such motivation had existed, modifying Bannitt's expressly different teachings would have required significant inventive effort.

For brevity, independent claims 33, 49, 52, and 71 are not quoted here, but the same reasoning applies because they recite subject matter substantially similar to independent claims 1, 18, 21, and 69.

Independent claim 64 recites, *inter alia*:

image creation circuitry coupled to at least one analog display device by at least one analog interface,

wherein said at least one analog interface is a video analog transmission interface having a limited transmission capacity that is insufficient to transmit a given image signal, and

wherein said image creation circuitry is configured to reduce a frame rate of said given image signal below a native frame rate to allow the transmission of said given image signal.

However, nothing in Bannitt discloses or suggests at least "wherein said image creation circuitry is configured to reduce a frame rate of said given image signal below a native frame rate to allow the transmission of said given image signal."

For at least these reasons, Applicant respectfully requests that the improper obviousness rejection of claims 1-72 over Bannitt be withdrawn and all of these claims passed to allowance and issue, it being understood that the remaining claims which depend from allowable

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independent claims 1, 18, 21, 33, 49, 52, 64, and 71 are also allowable over Bannitt, at least by virtue of their respective dependencies, as well as for their added features.

CONCLUSIONS

For at least the reasons referenced above, Applicant respectfully requests issuance of a Notice of Allowance.

While various distinctions have been noted with respect to the cited reference, there may be other limitations in the pending claims that are also distinguishable over the cited reference, alone or in combination. Applicant therefore reserves all rights and arguments with respect to all such other limitations and distinctions not expressly noted above. Moreover, to the extent that any claim amendments made above constitute a narrowing of the scope of claimed subject matter, such narrowing should not be construed as admitting the merits of any of the claim rejections. Applicant's failure (if at all) to expressly address above any particular statement or argument by the Examiner should not be construed as an admission or acquiescence that such statement or argument is accurate or proper.

The Examiner is respectfully invited to contact the undersigned if there are any remaining issues that can be resolved by telephonic communication.

Favorable action is respectfully requested.

Respectfully submitted,

_____/jet50352/_____
Jonathan E. Thomas
Reg. No. 50,352
Attorney for Applicant

General Electric Company
Global Patent Operation
P.O. Box 861
2 Corporate Drive, Suite 648
Shelton, CT 06484
T: (203) 944-6747
F: (203) 761-6712